

COMMENTARY

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## Commentary on 'Research in Nurse Education Today: Do we meet our aims and scope?' by Tony Long and Martin Johnson [Nurse Education Today 22 (1) (2002) 85–93]

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The special issue on global diversity in nursing education, published in January 2002, included a paper entitled 'Research in *Nurse Education Today*: do we meet our aims and scope?' Whilst its main purpose was to address the question concerning the aims and scope of the journal, this paper is well worth revisiting here for the significant issues it raises for those responsible for developing the curricula of research education programmes for healthcare professionals.

Earlier systematic analyses of research output include Akinsanya's (1984) early survey of the (then) 205 theses/dissertations in the Steinberg Collection, which were categorised according to the area investigated. It is interesting to note that nursing education was the most popular focus (28%). More recently, Traynor and Rafferty (1998) analysed the PhDs completed by nurses in the UK between 1976 and 1993 (n = 283). Again, these were categorised by topic area rather than by research methodology, with the 'organisation of service and administrative issues' being the most popular, followed by 'workforce characteristics and industrial relations issues', and 'specific clinical problems' in third

Acknowledging the inherent value of an analysis of research approaches, the categorisation used by Long and Johnson was in one sense disappointing. It would appear that research *methodologies*, such as ethnography and phenomenology, were adopted alongside research methods (such as questionnaires, semi-structured interviews and focus groups) to categorise the research studies published in Nurse Education Today (NET). Their use of the terms 'quantitative' (117 studies) and 'qualitative' research (100 studies) in particular may serve to perpetuate the myth that it is the type of data that is important, rather than the methodological underpinnings of a research study. Since a particular methodology can generate both numerical and descriptive/narrative data, use of the terms 'quantitative' and 'qualitative' research may not be helpful.

Setting aside the terminology used, Long and Johnson make some significant observations which can provide a useful 'mirror' to reflect on any possible biases or shortcomings in the research training provided. They note, for instance, the dearth

place. Whilst the focus of any research is of interest, the need for an evidence base for education practice means that research methodology is of particular interest, since it determines the type of evidence generated and its potential contribution to the developing knowledge base.

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<sup>&</sup>lt;sup>1</sup> Set up by the Royal College of Nursing in 1974, the Steinberg Collection of Nursing Research is a reference collection of UK nursing theses and dissertations from the mid-1950s onwards.

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of experimental research. Might this be a feature of education preparation — are we better at teaching students how to undertake descriptive surveys and phenomenology than, say, experimental design? How well is it taught in the programmes for which you are responsible or to which you contribute? Whilst recognising key methodological issues associated with experimental research, including withholding a potentially beneficial 'treatment', confounding variables, potential differences and possible contamination between groups, it is surely important for nurses to be proficient in the design and execution of experimental research. This will enable them to contribute as equal partners to collaborative research programmes, involving other healthcare professionals such as physiotherapists, clinical psychologists and medical colleagues.

They also note the apparent greater reluctance of UK-based researchers to use inferential statistical analysis when compared with papers of non-UK researchers. Whilst statistical packages eliminate the need to carry out manual calculations, students still require a sound understanding of how to interpret the results of statistical analysis. Do your students have sufficient grasp of key statistical concepts to be able to communicate effectively with a statistician when the need arises? If not, we may be constraining the type of research that students elect to pursue. Might some research students and researchers be selecting a research approach that reflects their education preparation and associated 'comfort zone', and adapting their research question(s) accordingly? A regular analysis of the range of methodologies underpinning the research projects undertaken by students in one's own institution, can provide some useful indicators that could be discussed as part of the periodic programme review process.

As an intervention, healthcare education takes many forms. What robust evidence base do we have for the effectiveness of education approaches such as reflective practice, problem-based learning (PBL) or blended learning? Should we also, therefore, be systematically investigating the value and effectiveness of those activities that have become embedded in education practice — what Baker (1998) refers to as the 'sacred cows', whose slaughter is likely to be particularly threatening. Perhaps because there is relatively little evidence about how people learn most effectively or how best to teach adults, the way is left wide open for educational fads to come and go. Haigh (2005) addresses this issue in a NET Editorial where she refers to the 'viral spread' of PBL. She suggests that 'PBL has evolved significantly from earlier days when a cautious optimism was expressed in its relevance to healthcare education to an almost global dominance in undergraduate teaching in the health sciences. This is despite a lack of convincing support of its beneficial impact upon the student or the patient experience and the at best conflicting evidence of its cost and relevance to basic sciences' (p. 2).

Research questions relating to perceptions and experiences are also crucial. So alongside positivist research, and equally valuable, are studies designed to explore students' perceptions and experiences in all their richness and diversity. For example, in the UK alone there are around half a million students enrolled on Masters programmes, many of which are assessed through course work. The majority of these students are part-time, yet how much do we know about their student experience? Are there data that institutions systematically collect which could be used to investigate the student experience and enhance the quality of education provision? Rather than small-scale evaluations of individual programmes, should not we be planning institution-wide projects, as well as research across several institutions? Healthcare professionals should be leading or contributing to general education research programmes, as well as focusing on healthcare education.

Whilst most of us will teach evidence-based practice because clinicians are increasingly expected to defend their clinical decisions and actions, the same does not appear to be true for education practice. When was the last time you heard a lecturer referring to the evidence base of their approach to teaching and learning? How can research studies that tend to be small-scale, short-term and undertaken on a single site provide the evidence base required for an evidence-informed culture? This means that educators are forced to 'rely upon a patchwork of piecemeal studies until more systematic work emerges' (Rafferty and Traynor, 1997, p. 47). What research has had the greatest impact on your practice as an educator?

A follow-up analysis of the papers published in NET since Long and Johnson's analysis<sup>2</sup> suggests that whilst descriptive surveys, generating quantitative and/or qualitative data still remain by far the most popular research approach employed, some of these surveys are longitudinal and/or large-scale, and two were undertaken using the Delphi technique. There are also numerous evaluation studies, and with a few notable exceptions,

<sup>&</sup>lt;sup>2</sup> This follow-up analysis has been based on the 34 issues of NET published between July 2001 and August 2005.

most are small-scale, involving a single programme or institution. This sample included just nine experimental/quasi-experimental studies. And whilst there are still quite a few studies that can only be categorised as 'qualitative' since the methodology is unclear, there are other studies that have clearly been undertaken within the naturalist paradigm — eight phenomenological studies, three grounded theory studies, three ethnographic studies and two interpretive studies.

To provide education that is both effective and sensitive to the needs of students and other stakeholders, healthcare educators must continue to contribute actively to the education research agenda. Analyses, such as the one undertaken by Long and Johnson, provide a crucial reminder of the need to monitor trends in research activity and, depending on the findings, adjust research curricula accordingly. It also enables us to reflect on trends in research and, depending on the base used for the analysis, to make useful comparisons nationally and internationally. Such an approach could also be used to analyse research output across particular groupings of institutions (such as those with a particular research standing, which in the UK might be a score of 4 and above in the Research Assessment Exercise). This raises an important question about what provides an appropriate basis for such analyses. If, as was done for NET, it is based on published research papers, there is the issue of those studies that were rejected, which for many peer-reviewed journals can be as high as 70–80%. This renders the base non-representative and incomplete as acknowledged by Long and Johnson. Whilst databases also share some of the same limitations, they can provide a wider evidence base than a single journal. This is illustrated by the bibliometric analysis of UK published nursing research between 1988 and 1995, using the Wellcome Trust's Research Outputs Database (ROD)<sup>3</sup> in order to compare the characteristics of nursing research compared with biomedical research. In this way, 1845 papers with a nursing focus were located (comprising about 1% of the total), providing a potentially highly fruitful source of data for analysis in whatever way is of interest (Rafferty and Traynor, 2000; Traynor et al., 2001).

Most importantly, Long and Johnson's analysis provides a possible research agenda — more large-scale research studies, including research programmes and multi-site/multi-institutional research; more longitudinal research; and more collaborative research across international boundaries. If, as I am sure the Editor of NET hopes, we embrace this agenda diligently, the profile of healthcare education research should look rather different in 10 years time and also provide healthcare educators with a more appropriate evidence base to underpin their practice.

## References

Akinsanya, J., 1984. Learning about nursing research. Nursing Times 80, 59–61.

Baker, M.R., 1998. Challenging ignorance. In: Baker, M., Kirk, S. (Eds.), Research and Development for the NHS: Evidence, Evaluation and Effectiveness, second ed. Radcliffe Medical Press, Abingdon, pp. 35–42.

Haigh, C., 2005. Editorial: PBL, viral spread and the role of the nurse educator. Nurse Education Today 25 (1), 1–2.

Rafferty, A.M., Traynor, M., 1997. On the state of play in nursing research. Journal of Interprofessional Care 11 (1), 43–48.

Rafferty, A.M., Traynor, M., 2000. Measuring the Outputs of Nursing R&D: A Third Working Paper. Centre for Policy in Nursing Research, London.

Traynor, M., Rafferty, A.M., 1998 Nursing Research and the Higher Education Context: A Second Working Paper. Centre for Policy in Nursing Research, London.

Traynor, M., Rafferty, A.M., Lewison, G., 2001. Endogenous and exogenous research. Findings from a bibliometric study of UK nursing research. Journal of Advanced Nursing 34 (2), 212—222.

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<sup>&</sup>lt;sup>3</sup> ROD is a database of published biomedical research, based on the Science Citation and the Social Sciences Citation indices.